THE VETERINARY RECORD

A Weekly Journal for the Profession.

Edited by WILLIAM HUNTING, F.R.C.V.S.

No. 783. JULY 11, 1903. VOL. XVI

THE SANITARY CONGRESS.

The Congress at Bradford has been a great success. Yorkshire hospitality, fine weather, and scientific enthusiasm combined to ensure a profitable and enjoyable meeting.

The veterinary section assembled on Wednesday under the Presidency of Mr. Chas. Drabble, M.R.C.V.S., who commenced business with a short introductory address, the pith of which was expressed in one sentence—"Local Authorities desirous of having a complete staff of professional advisers could not dispense with the services of a veterinary officer. He remarked in conclusion that "animal life was in every district numerically little short of human life, and the reaction of one upon the other for good or ill was a matter that the progress of modern pathology brought more and more into prominence as the years passed by, and as science became more exact and more practically useful."

Mr. Holburn, of Manchester, read a paper on "The Slaughtering of Animals for Human Food."

Mr. Brittlebank, M.R.C.V.S., of the Public Health Department of Manchester, contributed a paper on "The Collection, Distribution, and Contamination of Milk."

Mr. William Shaw, F.R.C.V.S., of London, wrote on the "Disposal of Dead Animals from a Sanitary Point of View."

Short but well sustained discussions followed, and the only word of complaint we heard was that the veterinary profession only sent thirty of its members to such a useful meeting. The big county of Yorkshire was but meagrely represented.

ROYAL COLLEGE OF VETERINARY SURGEONS.

At the Special meeting of Council held on July 2nd Principal W. O. Williams was relected President for the ensuing year, and no one will say the honour is not well deserved.

It is, however, a departure from the practice pursued for many years which, like everything else, has its advantages and disadvantages. The honour of being elected President of the Body Corporate is one that any member of the profession may aspire to after faithfully serving on the Council a few years. When the highest office is filled by a different member every year there is a chance for all. When the office is held for a series of years by one man some of the deserving aspirants are deprived of their opportunity. It may be argued that only our best should be elevated to the Presidency, but this would confine many good men to the ranks. It is also asserted that one year is too short a time to enable any President to do his best, as it is only after some months of office that he becomes master of all details and so most fitted to act as guide and controller. The natural reply is that the Council is really the governing body, and the proficiency for office of our chief is only a personal matter which the Council may appreciate or not.

These general considerations had little to do with the election of Professor Williams. His year of office earned for him the respect and gratitude of the Council. Part of his work was not finished and the members remembered that it was not good policy to "swap horses in the middle of the stream."

TWO INTERESTING LUSUS NATURÆ.

By C. E. DAYUS, M.R.C.V.S., Craven Arms.

The following, I thought, might prove of interest to some of the readers of your valuable journal. They are the photographs of the first calves of two Hereford heifers, the property of a client, Mr. Arthur Gough, Lydham, Bishop's Castle. The heifers had been running together through last winter, and it is not a little remarkable that in each case the off fore leg is the offending member. In the one case the leg turns at right angles under the sternum, the foot being visible from the opposite side, and in the

other it is turned backwards along the side of the body, the foot resting on the thigh of the off hind leg.

Both calves were kept until they were about two months old and sold fat to the butcher, being little inconvenienced apparently by their peculiar conditions, I am indebted to Miss L. Strawson, Bishop's Castle, for kindly taking the photographs.

ABSTRACTS FROM FOREIGN JOURNALS.

The Use of the "Polyvalent" Antistreptococcic Serum in the Treatment of Strangles and Purpura Hæmorrhagica.

Professor Nocard brought before the notice of the meeting of the Central Society of Veterinary Medicine, Paris, on June 11th, 1903, the use of a "polyvalent" antistreptococcic serum in the treatment of various affections due to streptococci. It is usually used as follows; 3 phials of serum each containing 10 c.c. the first two days, morning, noon, and night; 2 phials the next two or three days. It seems to abort the formation of the abscess and lessens the duration of the disease. It can be procured from the Pasteur Institute, Paris.

The "monovalent" antistreptococcic serum as originally brought out by Marmoreck is only of use in the case of purpura hæmorrhagica in the horse, and some streptococcic infections in man, but thanks to the suggestion of Roux, Marmoreck set to work to improve the utility of the serum which he did so by injecting into horses cultures of various streptococci of the strangles type, and by this means he has obtained a "polyvalent" serum which shows better and more constant results than with the "monovalent" serum.

H. G.

Laparotomy.

A dog showed symptoms of severe gastro-enteritis, with excessive wasting, took no food and was cold and stiff. Palpation of the abdomen revealed a swelling as big as one's fist, a little to the right and half way down the abdomen. Local anæsthesia was employed and the flank opened over the swelling and the intestine covering the foreign body exposed. On making a 1 cm. incision an india-rubber ball was removed. During the operation a jet of sterile salt solution was played on the field of operation. Jobert's suture were used for the intestinal wound and interrupted for the abdominal walls.

The dog made an excellent recovery, and two months after the operation took a first prize at the Paris dog show (class Cocker's springer).—*Bull. de la Soc. Cent. de Med. Vet.*

F. E. P.

Mr. John Stewart, M.R.C.V.S., Stirling, has purchased at a considerable figure the celebrated horse Warwick King, to take the place of his fine hackney stallion, Country Gentleman, which recently succumbed to an attack of inflammation of the lungs.—*N.B.A.*

SOUTHERN COUNTIES VETERINARY MEDICAL ASSOCIATION.

Meeting at Brighton.

The quarterly meeting was held at the Old Ship Hotel, Brighton, on Thursday the 25th June, when there were present:—C. Pack, Esq., Lymington, President; Messrs. F. Spencer, Hon. Sec., Basingstoke; H. Hall, Southampton; E. W. Baker, Wimborne; J. W. Pritchard, Worthing; A. C. Wild, Woking; W. K. Stuart, Hove; J. T. King, Bournemouth; J. A. Todd, Worthing; Prof. W. Pritchard, London; H. E. A. Charles, Brighton. Visitors:—Messrs. C. A. Squair, Reigate; H. E. Smith, Worthing; J. Fraser, St. Albans; Prof. H. A. Woodruff, London; D. Pugh, Sevenoaks; R. Roberts, Tunbridge Wells; G. H. Livesey, Brighton.

Letters of apology for non-attendance were read from the Mayor of Brighton (Alderman J. C. Bucknell), Messrs. E. R. Harding, J. Simpson, P. Simpson, H. Jeffries, Callow, Colebrook, W. Caudwell, J. S. Wood, Goodall, G. M. Perry, J. B. Martin, Col. Nunn, Prof. Hobday, and C. F. Hulford.

On the motion of Mr. E. W. Baker, seconded by Mr. H. Hall, the minutes of previous meeting were taken as read and adopted.

In accordance with a recommendation from the Central Veterinary Society the following resolution, proposed by Mr, E. W. Baker, seconded by Mr. H. Hall, was put to the meeting and carried:—

To the Secretary of War,

The members of the Southern Counties Veterinary Association beg to bring to your notice that on June 7th of last year the Council of the Royal College of Veterinary Surgeons addressed you regarding the condition of service in the Army of Members of the Veterinary Profession, which action the members of this Society entirely endorse, but inasmuch as no report of the Committee appointed to consider the grievances of the Army Veterinary Department has been published, they respectfully request the same may be communicated to the Royal College of Veterinary Surgeons at an early date.

In accordance with the recommendation of the Lincolnshire Veterinary Medical Association, the following resolution was, upon the motion of Mr. J. T. King, seconded by Mr. E. W. Baker, put and carried:—

"That this meeting of the Southern Counties Veterinary Medical Association respectfully suggest to the Board of Agriculture that the employment of Local Veterinary Inspectors to determine the existence of swine fever or other scheduled diseases in a neighbouring inspector's district, is likely to decrease the local practitioners' prestige in his own district and is calculated also to do him harm."

In the discussion that took place before passing the above, the President said it was a matter that should certainly be brought to the notice of the Board of Agriculture, and if presented by all the veterinary associations might have the desired weight.

Mr. J. Fraser said he had been an inspector under Government for 20 years but was not now. Another inspector had been appointed and he came right up to his door. He considered it a reflection on his medical skill, and it was doing him a deal of harm. He quite exonerated the inspector from the intention of doing harm, but under the circumstances in which he was placed it could not be avoided. Personally he considered it a very unjust system.

Mr. R. Roberts recommended the exercise of patience. This was a trial measure of the Board of Agriculture, and he thought it was very likely they would appoint more inspectors. Yet he could not see very much

difference between the Board of Agriculture appointing local inspectors and the Local Government Board who did the same. In big centres they were not averse to any representations that had been made.

Mr. J. T. KING supported Mr. Fraser's view of the matter.

SPECIMENS.

Mr. H. E. A. CHARLES exhibited stones he had taken from the stomach of a young retriever; also from the stomach of a fox-terrier, aged about six years.

Mr. G. H. LIVESEY exhibited the spleen of a poodle dog, 11½ years old, which showed ruptures in several places. He was at some loss to ascribe any cause for these ruptures and invited the opinion of the meeting as to whether the cause was external or internal.

Several members related their experiences in somewhat similar cases, and the general opinion of the meeting was that it was a case of diseased tissues.

ELECTIONS AND NOMINATIONS.

The names of the four gentlemen, nominated at the last meeting—Messrs. H. E. A. Charles, J. W. Pritchard, W. K. Stuart, and A. C. Wild were now put to the meeting for confirmation. They were unanimously elected.

The following gentlemen were nominated:

Messrs. H. SMITH, Worthing, J. T. ANGWIN, Arundell, on the motion of Mr. Pritchard, seconded by Mr. Todd.

Messrs. W. BURT, Brighton, G. W. BLOXAM, and G. H. LIVESEY, both of Hove, on the motion of Mr. Charles, seconded by Mr. Stuart.

Mr. E. M. PERRY, Eastbourne, on the motion of Mr. Todd, seconded by Mr. Stuart.

HON. ASSOCIATE.

Professor J. WORTLEY AXE was elected an Honorary Associate.

The PRESIDENT, who was warmly applauded when he rose, delivered the following address.

PRESIDENTIAL ADDRESS.

C. PACK, M.R.C.V.S., Lymington.

Gentlemen,—As this is the first meeting at which, by your kindness in electing me as your President for the year, I have had the pleasure of presiding, allow me first of all to thank you very sincerely for the very great honour you have conferred on me. I hope that when my term of office expires my individual efforts, backed up by those of the members, will not only have sustained but increased the usefulness of the Association and its membership. I consider that latterly the association has taken a step in the right direction by going further afield with its meetings and so getting into touch with members of the profession who are not members of this or any veterinary association. There is still room for increase, and we should, I think, each one of us try to induce others to join for the common benefit of all. The Southern Counties Association has a wide field, but for some reason or other the members of the veterinary profession in it do not appear to be keen on listening to or discussing professional matters as introduced at such meetings as this. This is the only apparent reason for the small attendance we usually get. But after all we are not the only offenders in this respect. The attendance at the annual meeting in Red Lion Square is about on a par with ours, and I think that the editorial remarks in *The Veterinary Record* of June 6th last respecting the attendance at the annual meeting could be very truthfully applied to ours.

It is usual on an occasion such as this for the leading questions of the day as affecting the veterinary profession to be alluded to. Judging from the report of the annual meeting I should say that there is no very burning question at present *sur le tapis*. Things in general appear to have assumed a form of peace and quietude. Even candidates for Council this year appeared to have no matter of importance upon which to offer their views in their election address. Perhaps this condition of things may be an indication of the excellent manner in which the President has carried out his duties in the past year.

Now as to the future prospects of the veterinary profession. I think that 30 or 40 years since had any one prophesied such a complete change in our profession it would have been difficult to find believers. With regard to country practices; in those days a veterinary surgeon found plenty of employment in a small circle. Agriculture was in its prime, and employment for a V.S. plentiful. Whether the change is all due to the decline of Agriculture, or whether the general public has been educated in the symptoms of minor ailments of animals, so that they feel themselves competent to treat ordinary cases, certain it is that with County Council lectures to teach symptoms; cheap literature, such as articles on the diseases of stock in the agricultural papers by veterinary surgeons, and medicine and embrocations supplied by firms of medicine vendors, the V.S. is very seldom called in the present day where formerly he was considered indispensable, and if he is he will usually find that a dose or two of Messrs. So-and-So's mixture has been administered already. Neither are we asked to perform the number of operations as formerly. I know several farmers who do all their own castrating, docking, etc. This is all the more serious to our welfare when we consider that several diseases which were formerly a source of revenue to practitioners are now scheduled under the "Contagious Diseases Act, and not allowed to be treated at all.

But progress has brought about a change in one direction—a change for which both the members of the profession and the general public have to be thankful and from which the poor animals I am sure derive great benefit—I allude to the decline of the country quick, whose day is, I am sure, fast drawing to a close, and we seldom hear of such filthy mixtures being forced down poor animals throats as formerly. Wounds, too, are treated in a much more rational manner. I know that this state of things affects some districts very much more than others. Some practices contain a number of wealthy clients with valuable stock who spare no expense as regards their welfare, and he is a fortunate man who has established himself as a practitioner in one of those districts.

We find, too, that endeavours are made to supersede animal power for traction by mechanical contrivances. Not only are motors used for travelling and conveyance of goods but they are now introduced for ordinary use on the farm to take the place of horses, so that it is not at all improbable that some of us may live to see all the ordinary work of a farm carried out without the services of a horse.

Altogether, I cannot look at all these things without some apprehension as to our future as a hard working profession. The post of meat inspector, and the many other calling that offer themselves to those who make some part of veterinary science a special study, will, I am afraid, not prove an adequate remedy, as others, besides veterinary surgeons can, and will I think, fill these if they choose to qualify themselves by making a study of bacteriology.

With regard to our position with the Board of Agriculture, speaking generally I am afraid that at the present time individual members of the profession have little to be thankful for. In the nineties I think most of us were fairly well satisfied with the employment meted out and the remuneration received in connection with swine fever, but unfortunately the condition of

things has changed here also. Owing to the ignorance displayed by some of us, the haste to make a fortune, or some other reason, it was found necessary to employ specially trained inspectors to the total exclusion of the general practitioner. But I think the result is about the same, the disease appearing and reappearing with much the same frequency.

Within the past few months a number of practitioners have received appointments as veterinary inspectors to the Board. One or two cases which have occurred in my own practice make me wonder whether they are not considered as a kind of reserve staff. In one case a labouring man had the misfortune to own a pig that died. He reported it to the police, who duly reported it to the Board as a suspected case of swine fever. Now one would naturally suppose that with a veterinary inspector of the Board living only three miles from the spot he would have been requisitioned to investigate the case, but instead of this the veterinary inspector from the nearest port, between twenty and thirty miles away, attended and carried out the business. Again, only last week an outbreak of suspected swine fever was reported and after three days this place was visited by an inspector from London, although there were two provincial inspectors living within twenty miles. If this is the system upon which things are to be carried out I am afraid the appointment may be considered a sinecure, except in cases where the permanent members of the staff are insufficient to cope with the extra work.

Now, gentlemen, we have a deal more business to get through, and I do not intend taking up your time, as I am sure it will be much better employed in listening to the speakers who follow, so with many thanks for your kind attention I will conclude this short address.

Mr. FRASER said there would evidently not be time to hear two papers read and discussed, or indeed hardly one of them. He had come prepared, as they saw on the agenda, to give them one, but seeing that the exclusion of one was obvious, he should be pleased to reserve his until the next or another meeting, so as to allow Professor Woodruff time to read his interesting composition and for a thorough discussion upon its theory.

Professor WOODRUFF at first courteously demurred at standing in the way of an older and experienced gentleman, but finally read his paper, which was listened to with the most perfect interest and attention.

THE RELATION OF THE VETERINARY SURGEON TO PUBLIC HEALTH PROBLEMS.

By Prof. H. A. WOODRUFF, R.V. Coll., Camden Town.

The scientific methods of dealing with the numerous problems connected with the public health are of comparatively recent origin. New facts are being discovered every day; old theories are being revised and tested, men of widely separated callings are focussing their energies on the same question from different points of view, and instead of vainly seeking for the mythical elixir of life—the specific for all the ills to which flesh is heir—men are adopting the infinitely higher, and at the same time eminently successful, plan of finding out the laws of health.

Although not the direct guardians of human health and life in the same sense as the medical profession, yet veterinary surgeons can take a very real and important part in this work, one of the highest types of work to which man's energies can be directed. It is the object of this paper to enumerate a few of the more obvious directions in which our professional co-operation with the army of public health workers can be of service, and to suggest some means by which our assistance may be more advantageously and economically made use of than is the case at present.

As I have said the science of public health is a comparatively new one, and the idea of veterinary co-operation being of service is quite a recent development of the science. It is necessary to briefly review the history of sanitary science to see how this development came about.

Sir W. J. Collins in a lecture delivered before the Sanitary Ins itute in Manchester last September said:—"It would not be difficult to adduce reasons for regarding the late Queen's reign as especially the epoch of sanitary reform. The year of Queen Victoria's coronation has, indeed, been fixed upon by those who have written the history of sanitary institutions, as a landmark in our vital statistics and as memorable for the first step then taken in the utilisation of medicine by the State. I refer to the initiation of the work of the Registrar-General."

From this time onward there were many attempts at legislation, Parliamentary Commissions and Royal Commissions followed each other, inspired largely by a zealous sanitary reformer, Sir Edward Chadwick. Chadwick's dominant idea (according to Sir B. W. Richardson's account of his life) was "that man could, by getting at first principles, and by aiming at causes which affect health, mould life together into its natural cast, and beat what had hitherto been accepted as fate, by getting behind fate itself and suppressing the forces which led up to it at their prime source." Thus early the prevention of disease by finding the *causa causans* and attacking *it* was the aim. Modern pathology has elaborated this idea and looks indeed over a wide range for the causes of disease; heredity and its predispositions, together with all the external surroundings—housing, occupation, food, etc.—all are considered in their bearing on the national health, and it says much for the zeal and energy of the sanitary authorities that the fall in the mortality in this country has been progressive since the commencement of the records.

But a most important and more recent factor has to be considered, namely, the discovery of the *contagium vivum* or *germ* theory of disease. Bacteria had been observed since the 17th century, the idea of their spontaneous generation had been finally disproved by Pasteur and Tyndall in 1859, and in 1863. Davaine claimed that the bacillus found in the blood of animals dead of anthrax was the cause of the disease, but it was not until Pasteur showed how to grow these organisms outside the living body, and Koch in 1880 discovered a method of separating various species and cultivating them in pure culture that the surprising advances of bacteriology were made possible. Then too, as might have been inferred from Darwin's work, the essential unity of pathology, whether of man or of the lower animals began to be really understood, and especially in view of the fact that many bacteria were found capable of infecting both man and animals. Thus the field of view open to the eyes of the sanitarian was greatly widened, and the possible effects of the health of men on that of animals, and conversely, of the health of animals on that of men, were seen to be of vast importance.

But besides bacteriology another branch of biological science, namely, parasitology, confirms the importance of the relation between the health of man and that of animals. Several of the animal parasites which affect man afford good examples of alternation of generation, *i.e.* they complete their life-cycle in two generations, lived alternately in two hosts of different species. For the perpetuation of the parasite these hosts must be infected in turn, and since many of the parasites affecting man complete their life-cycle in one or other of the domesticated animals there is a direct relation between

the prevalence in man and the other animal concerned. Again the suggestion may be hazarded that some relation may be found to exist between diseases of men and animals caused by blood parasites or hæmatozoa, although this branch of pathology is only in its infancy now. At any rate sufficient has been said to support the statement that there is a close relation between the health of animals and that of man.

Comparative Pathology.

I have mentioned above the essential unity of pathology, and for this reason the value of the co-operation of the human pathologist and the veterinarian is very great. The work done by Chauveau on vaccinia, and that by Nocard, Bang, Schütz and M'Fadyean on tuberculosis amply proves this. Then too, Pasteur, although neither a medical man nor a veterinary surgeon, learned many most important general principles applicable to bacterial diseases in general from his study of animal diseases, notably anthrax. As before mentioned our knowledge of tuberculosis, one of the most terrible scourges of the human race, has been greatly advanced by veterinary observers since Koch discovered the bacillus in 1882, and one of the most important facts in considering measures for preventing the disease, namely, the practical absence of hereditary tuberculosis, is due in very large measure to the researches of Bang, the eminent Danish veterinary surgeon.

But besides those diseases which are recognised as being directly transmissible from animals to man, veterinary pathologists are confronted by diseases of animals which are of an almost similar nature to some occurring in man, and their investigations are useful in that methods found of value in these animal diseases may be of great service in the hands of human pathologists when applied to analagous conditions in man. For example, a new method of cultivating an organism responsible for a disease in animals, may suggest a similar method to human pathologists and so lead to the discovery of the causal organism of some disease of the human subject. Roux's success in cultivating the germ of contagious pleuro-pneumonia of cattle in collodion capsules inserted in the peritoneal cavity of rabbits can hardly fail to have numerous applications in other diseases the causal organism of which is yet to seek.

Again, it is highly interesting to note that the Cancer Research Commission is investigating cancer in the lower animals with a view to elucidate the mystery of its cause both in man and animals, and in this, the problem which has proved up to now the most difficult of all in the range of pathology, the veterinary surgeon can and ought to take a prominent share. At any rate the experimental part of the investigations as to the contagiousness of cancer and the presence of a causal organism, the hereditary transmission, and other questions ought not to be left altogether in the hands of medical men ; and on the clinical side the facts observed by veterinary surgeons should be most carefully recorded and considered.

Serum-therapy and Animal Products.

Another branch of the public health service in which veterinary surgeons should have some share is in the preparation of vaccine lymph and therapeutic sera for producing immunity, or for curative agents, in such diseases as small-pox, diphtheria, and tetanus. It is of the highest importance that the animals which are used to provide these agents should be in perfect health before being used, and it is equally necessary that in the case of vaccine-producing calves a post-mortem examination, made before the lymph is sent out for use, should be conducted by someone with a knowledge of veterinary pathology.

But now to come to more concrete questions, and first

Those Diseases which are Communicable from Animals to Man.

These may be classified as follows :—

Diseases of certain bacteriology.—Anthrax ; glanders ; tuberculosis.

Diseases of uncertain bacteriology.—Vaccinia or cow-pox ; foot-and-mouth ; rabies.

Diseases in which animals act as carriers of infection, possibly as sources of infection.—Actinomycosis ; diphtheria ; scarlatina.

Parasitic skin diseases.—Scabies ; tinea and favus.

Diseases caused by zoo-parasites.—Tænia mediocanellata (cysticercus bovis) ; T. solium (cysticercus cellulosæ) T. Echinococcus (echinococcus veterinorum). Trichina spiralis.

This list is too long for each disease to be dealt with at any length, but it is necessary to point out the general methods of infection ; the relation between the prevalence in animals and in man, and the importance of these factors to public health.

Anthrax, due to the bacillus anthracis, an obligatory blood parasite, is commonest in cattle and sheep, but is not infrequently seen in horses and pigs. The special danger of this disease lies in the fact that its spores are very resistant and may live for years. Man is usually infected as a result of : (*a*) handling infected wool or hides and so inhaling the dried spores ; (*b*) slaughtering diseased animals or making a post-mortem examination on them and so getting inoculated ; (*c*) eating parts of carcases dead of anthrax. The great majority of the cases are found in the West Riding of Yorkshire, round about Bradford, in Leicestershire, and in Northamptonshire. The only precautions observed in Bradford in the case of wool and hides are to separate the "fallen fleeces" and "dead hides" and steep and wash them in hot soap "suds," and afterwards sort them while damp. For the apparently sound fleeces and hides it is only considered necessary to have open wire trays to work on and a series of dust extracting fans. In the case of foreign hair, the antiseptics used to steep the hair in cannot be used without damage to the material of anything like sufficient strength to kill the spores, and in most cases the liquids used for washing or steeping, and containing virulent spores, are poured into the drains and no doubt account for many cases of animal infection in the surrounding district. If only these foreign hides, wool, hair, etc., could be satisfactorily disinfected anthrax might easily be got rid of with the carrying out of the present regulations of the Contagious Diseases (Animals) Act, namely, notification, burial without a post-mortem examination, and with proper precautions ; and disinfection of the premises and observation of the in-contact animals for 7-14 days. In meat inspection any affected carcase must be totally condemned.

Glanders due to an obligatory parasite, the bacillus mallei affects chiefly horses, also donkeys and mules, and in Great Britain occurs commonly only in and around a few of the largest towns, especially London. The disease affects man only as the result of infection from diseased animals, hence the importance to the public health of its control in animals. In a paper read before the Sanitary Institute last year Mr. William Hunting said, "Our average annual loss of horses from glanders is 1,700. Our annual loss of men is 5, but I estimate it at nearer 50." Professor Nocard in the subsequent discussion drew attention to the prevalence of glanders in the human subject in France, and pointed out that although there was a decrease of glanders in horses there was an increase in the number of cases in man, and both these authorities suggested that many cases of glanders in man occurred due to direct infection from horses, but were not diagnosed by the medical attendant, Professor Nocard stating as above that with more

careful diagnosis on the part of medical men in France the number of deaths recorded was increasing. Infection in man is most commonly, if not invariably, brought about by inoculation through a wound or a mucous membrane by means of animal discharges, either nasal discharge, or pus from a farcy bud.

The regulations for the control of glanders are, at any rate in London, notoriously unsuccessful, and the reason is not far to seek when we remember that these regulations deal only with clinically affected cases and take no note of the in-contact animals, many of which probably have the disease in a latent form. Mallein as a diagnostic agent, though proved beyond all question to be reliable, is not yet recognised by the Board of Agriculture, and so is not only of no use to the authorities in stamping out the disease, but is actually a cause of its spread, for the owner in many cases has his horses tested privately and the reacting ones are sold and become new centres of infection in other studs. In the paper already referred to Mr. Hunting said: "Almost all that is necessary to make the regulations against glanders as effective as those against rabies is a provision dealing with "in-contact cases," and there is no doubt that the veterinary profession, as well as the local authorities, fully agree as to the need for new powers in this direction.

Tuberculosis, a disease responsible for 60,000 deaths per annum in this country might, a short time ago, have been taken as the most serious case of animal infection setting up disease in man, but since Koch's startling expression of opinion at the British Congress on Tuberculosis two years ago, the question must be considered *sub judice* until more positive experimental proof, if that be possible, is afforded. But that is no reason for neglecting the possible dangers from animal infection, and so much was the Congress impressed with the danger of doing this that the following official resolution was proposed by Sir Herbert Maxwell, M.P. (President of the 2nd Royal Commission on Tuberculosis), seconded by Earl Spencer, and carried unanimously, namely, "That in the opinion of this Congress, in the light of the work that has been presented at its sittings, Medical Officers of Health should relax no effort to prevent the spread of tuberculosis by milk and meat." That resolution is sufficient justification for the veterinary profession to continue to urge the local authorities to undertake this work of meat and milk supervision. But although the question is undecided several prominent authorities have not hesitated to proclaim their disagreement with Koch, but have reiterated their firm opinion that bovine and human tuberculosis are inter-communicable. Professor M'Fadyean in his address to the British Congress contrasted Koch's assertion that a primary intestinal infection with tuberculosis is extremely rare in the human subject, with the reports of 547 post-mortems on children conducted, some by Dr. George Still, some by Dr. Shennan, in which they found 28-29 per cent. of the cases due to primary intestinal infection. Professor Nocard said at the same meeting: "Yes, I believe, nay I am convinced that bovine tuberculosis is a danger to man. It is especially a danger in milk," and later at Manchester in Septemper, 1902, he strongly affirmed (1) that the bovine race is not refractory to human tuberculosis; and (2) tuberculous bovines can give tuberculosis to man. He said "all mammalia, including monkeys, become tuberculous after ingestion of milk from tuberculous cows. It would be absurd to contend that man alone offers an exception to the rule." At the British Congress too, Dr. Ravenel, Bacteriologist of the State Live Stock Sanitary Board of Pennsylvania, described three cases of direct infection of man by the bacillus of bovine tuberculosis, which cases he had himself seen, and from one of which he had recovered the bacillus in pure culture.

Now what is the prevalence of tuberculosis in cattle? Professor M'Fadyean says "We know that about 30 per cent. of all the cows giving milk in this country are tuberculous in some degree." Fortunately however these need not all be considered dangerous, for it is generally agreed that only those animals with tuberculosis of the udder are likely to give infected milk, and M'Fadyean on this point says "My own experience leads me to think that about 2 per cent. of the cows in the milking herds in this country are affected with tuberculosis of the udder." This then represents the possible danger from milk. What precautions are taken to prevent this danger? In the same address Professor M'Fadyean said "The present state of the law, or rather the almost entire absence of any law dealing with tuberculous udder disease in cows is a scandal and a reproach to civilisation. It hardly sounds credible, but it is a fact, that the owners of a cow in the most advanced state of tuberculosis and exhibiting the most manifest signs of udder disease, may sell that cow's milk for human food as long as the sale has not been specially interdicted on the certificate of a veterinary surgeon," and further "If every town and rural district produced its own milk it would be a comparatively simply problem to organise and carry out a fairly efficient system of inspection of milch cows, but as the law at present stands the majority of the population cannot obtain this safeguard. With the exception of Glasgow, Manchester, and a few other places a local authority has no power to inspect cows outside its own district, and the helpless position in which this state of the law leaves the inhabitants of London and other large towns is obvious. In the meantime a good case can be made out for making general the special powers relating to inspection of cows in outside districts which a few fortunate cities have acquired by special Acts of Parliament This also was one of the directions in which the 2nd Royal Commission on Tuberculosis considered immediate action necessary." In addition to the granting of powers to make inspection general, I would suggest that it is very necessary, both for reasons already considered, and for others to be adduced later on, that there should be compulsory notification of any form of udder disease in dairy cattle.

The possible danger from tuberculous infected meat is much less important, but there is no justification for the absence of any uniform system of meat inspection in this country. A general system of meat inspection treating tuberculosis on the lines of the recommendations of the Royal Commission on Tuberculosis is greatly to be desired and would give all necessary security against human infection with tuberculous meat. The recommendations are: The entire carcase and all viscera may be condemned, (*a*) when there is miliary tuberculosis of both lungs; (*b*) when tuberculous lesions are present on the pleura and peritoneum; (*c*) when tubercular lesions are present in the muscular system or in lymphatic glands in or between the muscles; (*d*) when tuberculous lesions exist in any part of an emaciated carcase. The carcase if otherwise healthy shall not be condemned *in toto*, but every part containing tuberculous lesions shall be seized, (*a*) when the lesions are confined to the lungs and thoracic glands; (*b*) when the lesions are confined to the liver; (*c*) when they are confined to the pharyngeal lymphatic glands; (*d*) when the lesions are confined to any combination of the foregoing but are collectively small in amount.

Vaccinia or cow-pox.—Casual vaccinia, *i.e.* the accidental infection of the human subject with cow-pox occurs by inoculation and is practically only seen in the person of milkers or attendants on diseased cows. It produces painful local lesions and sometimes rather severe constitutional affects, but there is no recorded fatal case.

Foot-and-mouth disease is fortunately unlikely to get a permanent foothold in this country, but there is always

a danger of infection being brought in, in animal products such as hides and wool or in straw. In the cases which have occurred in man the infection has been traced to the milk of affected cows, and the milk of animals affected should of course be condemned.

Rabies.—Here again the disease does not exist in Great Britain at the present time, but the danger is always present of infection being carried over from the continent, and it is much to the hoped that no relaxation of the quarantine regulations will be allowed. Infection to man is almost invariably conveyed by the bite of a rabid dog, the saliva being the most virulent material. Quarantine and supervision of animals entering from abroad, and the application of the muzzling order to wide areas round any centre where a case occurs, are quite sufficient to present any general spread of this disease.

Actinomycosis.—Here the source of the infection is probably the same in both man and animals, namely, cereals or some foreign body contaminated with the fungus and causing a wound of the mucous membrane, generally of the mouth, but from numerous experiments it is found that natural transmission from one animal to another is extremely rare if it occurs at all, and there is no recorded case of natural transmission from an animal to man. The disease can, however, be transmitted from animals to man and *vice versa* by experimental inoculation.

Diphtheria.—This is a very serious disease of the human subject and it needs consideration here for the reason that cow's milk has been frequently put down as the medium if not the origin of the infection. It is not difficult to understand how milk may be the medium of infection by being itself infected with diphtheria from a human source during transit from the cow to the consumer. The second hypothesis is however much more important, namely, that the cow herself may be the source of the infection. Sir R. Thorne-Thorne in an article on diphtheria in Clifford Allbutt's "System of Medicine" says, "But the more we learn of milk as a vehicle of diphtheria the more probable does it become that infection is much more frequently derived from the cow herself than from repeated specific contamination by the human subject," and in describing the investigations which were made. The same writer says "Later it became possible to trace the milk which conveyed diphtheria in very definite fashion to certain cowhouses in which one or more cows—notably those which had recently calved—had suffered from an ailment which is certainly infective from one cow to another, and is associated with certain definite symptoms, including a rise of temperature, and a form of eruption on the udders and teats, which when seen in its later stages has hitherto been commonly regarded by cowkeepers as "chapped teats. The writer continues, "At the next stage in the enquiry it was found that a similar disease could be produced in the cow by inoculating the animal with subcultures of the diphtheria bacillus, and when this was done the material derived from the induced vesicles and pustules were in turn found to contain the same bacillus. And further, the milk of cows thus inoculated was found to contain the diphtheria bacillus in abundance." Without subscribing entirely to these opinions, which are by no means established, we are entitled to consider this as an additional reason for the notification of udder disease, and for a general system of dairy inspection.

Scarlatina.—Here again is a disease of the human subject in which milk has been frequently blamed as the medium of infection. As with diphtheria, there is the possibility of accidental contamination of the milk from a human patient, either by the hands of the milker or by some exposure to infection before reaching the consumer, and no doubt in most cases of infection by means of milk this method would account for it. But there is a possibility of infection coming directly from the cow and many medical men are of opinion that this does happen. In the historic Hendon case in 1885 an investigation was made by Power and Wynter Blyth in which they traced the outbreak to a certain dairy at Hendon, and to certain cows in that dairy which were suffering from an ulcerative eruption on the teats and udder. Dr. Klein made a careful bacteriological investigation and expressed his opinion that the disease of these cows was the analogue of human scarlet fever. He isolated an organism, a streptococcus, from the lesions in the cow which he also found in human scarlet fever and which he holds to be the specific cause of that disease.—(Foord Caiger, M.D., in Allbutt's "System of Medicine.")

Klein's opinion that scarlatina is a disease directly transmissible from the cow to the human subject lacks confirmation, and is by no means the view of veterinary surgeons, but here also we may claim this opinion of many medical men as supporting the need for dairy inspection.

Scabies, Tinea, and Favus.—These parasitic skin diseases sometimes transmitted to man are of comparatively little importance, and bear so little on the subject of my paper as to require only mentioning.

Animal Parasites.—There are several animal parasites causing disease which are transmissible to man from the domesticated animals, and some of these are important, namely, tænia mediocanellata or inermis, tænia solium, tænia echinococcus, and trichina spiralis. These are all conveyed by the medium of diseased meat, and meat inspection is the only adequate protection against them. The tænia mediocanellata of man corresponds to the hydatid cysticercus bovis, which is found in the muscles of the ox. For man to become infected he must eat raw or badly cooked meat containing the living hydatid. The cysts are about quarter-of-an-inch or less in diameter and show at one point a thickened white opaque speck which is the potential head of the tapeworm. The common situations of the cysts are the muscles of mastication—especially the internal pterygoid—the heart, tongue, and pectoral muscles. From the fact that the internal pterygoid is almost constantly affected where the disease exists at all, inspection of this muscle is sufficient. Any carcase affected with this parasite must be totally condemned. A similar parasite is the cysticercus cellulosæ of the pig, being the hydatid form of the tænia solium, the commonest tapeworm of man. It occurs chiefly in the abdominal muscles, in the diaphragm, tongue, heart, and muscles of mastication. Carcases affected should be destroyed. The tænia echinococcus does not itself infest man, but occurs in the dog. The hydatid form, however, not only occurs in cattle, sheep and pigs, but also sometimes in man. The infection is by means of water, food, or utensils, which have been contaminated with the ova of tæniæ in the dog. The disease in man is rare in this country but common in Australia, especially in swampy districts. The best method of prevention is the destruction of all viscera of animals containing the hydatid, so preventing the infection spreading to the dog from whence it in turn might affect man.

One other parasite—a round worm, trichina spiralis, remains to be mentioned. This is a parasite which occurs in man as a result of eating trichinous pork. The embryo parasites occur in small capsules in the muscles of the pig, especially the diaphragm, the intercostals and the muscle of the intestinal walls. When eaten by man, the capsule is broken down and the embryo set free in the intestine. Here it soon becomes mature, and in about a week new embryos are hatched by the females, and in a short time these find their way through the wall of the intestine and gain a lodgement in muscular tissue somewhere, where they again become encysted. Pigs are usually infected by eating trichinous rats, the rats getting the infection from one another or from offal in the slaughterhouse. This disease is a serious one in

man and is fairly common in Germany, and it is necessary to note that ordinary cooking will not destroy this parasite which will resist a temperature of 60 to 70 or even 80 C. Thorough meat inspection is therefore the only safeguard and affected carcases are totally condemned.

And now having endeavoured to show that there is a very real and close relation between the health of the domesticated animals and that of man, it is necessary to summarise those measures which are available, and ought to be taken advantage of, to limit the danger to the public health.

These measures may be tabulated thus :

(1) Prevention of entrance of infection from abroad. (*a*) Port inspection. (*b*) Slaughter of live animals at the port of entry. (*c*) Disinfection, where possible, of animal products.
(2) Notification of, and regulations for controlling contagious diseases of animals.
(3) Dairy inspection, and compulsory notification of all udder diseases.
(4) Meat inspection, compulsory in towns.

Prevention of Entrance of Infection from Abroad.

Fortunately we live on an island and are able to prevent the introduction of diseased animals from abroad with little difficulty. The law by which all live cattle from abroad have to be slaughtered at the port of entry, and the power of the Board of Agriculture to prohibit animals landing from any country where disease exists, are very valuable provisions, and in these days of quick transit and cold storage have very little effect on our meat supplies. Some more careful supervision of foreign horses entering the country appears to be necessary, although this hardly affects public health. The disinfection of hides, wool, and animal products generally, where it can be done without damaging the goods for manufacturing purposes would be of great service in preventing anthrax and possibly foot-and-mouth disease.

Notification of, and Regulations for, Controlling Contagious Diseases of Animals.

The contagious diseases recognised in the Contagious Diseases (Animals) Acts, 1894 and 1896, and for which regulations are made by the Board of Agriculture, are : Cattle-plague, Foot-and-Mouth, Pleuro-pneumonia, Sheep-scab, Sheep-pox, Swine-fever, Glanders, Rabies, and Anthrax. To these Tuberculosis of cattle should be added. Tuberculous animals showing clinical signs of the disease—"piners" or "wasters," or those affected with tuberculosis of the udder, are a danger both to public health, and a prolific source of animal infection, and they should certainly be notified. The sale of milk from these animals should be made illegal ; those with tuberculous udders should be slaughtered and separation of the diseased from the healthy should be insisted on. In the case of glanders, which is included under the Act, there is a special order regulating the disease. Probably glanders is on the increase ; at any rate it is a source of vast expense to the local authorities in London and other large towns, as well as the private horse-owners, and it takes its toll of human lives each year. The great need, as stated above, is for power to deal not only with clinically affected animals, but with the "in-contact" animals.

Dairy Inspection and Compulsory Notification of Udder Diseases.

As I have endeavoured to show, inspection of dairy cattle is a very necessary step in guarding the public health from such diseases as tuberculosis, foot-and-mouth, diphtheria, and possibly actinomycosis and scarlatina. The very serious rate of infant mortality in our large towns largely arises from bad feeding, and a pure milk supply from healthy cows is most important in this respect. For this reason udder disease of any and every kind should be notified, for it is absurd to allow the cow-keeper to decide as to which forms are dangerous and which are not. Speaking at the Congress on Tuberculosis, of the danger of tuberculous milk, Prof. Nocard said, "It seems as if we in France should be armed against this danger ; but it is not enough to have good laws, it is necessary to have the means of applying them. But we have not the means. The mayor must issue the order for the destruction of a tuberculous cow, and before he can give the order he must be sure that it has a tuberculous udder ; but his only means of knowing this is the declaration of the owner as prescribed by the law. But dairymen never report when their animals are ill, or if they do so, it is when they cease to give milk—when they are no longer profitable in the dairy—that is to say, just when they cease to become dangerous ; in fact the law remains a dead letter. That is why last year we demanded that a periodical inspection of all milk for human consumption should be organised." That is what the veterinary profession in England should demand, and we can well ask the medical profession to give us their unstinted support. Fortunately there are two precedents which may be taken as models on which to frame general powers applicable to the whole country. These precedents are the Public Health (Scotland) Act of 1897, and those clauses of the Manchester Corparation Act of 1899, which refer to dairy and milk inspection. In the Public Health (Scotland) Act in Section 60 it is laid down that a medical officer shall, if he suspects milk to be causing infectious disease in human beings, visit the dairy, and if accompanied by a veterinary surgeon shall examine the animals and both officers shall report to the Local Authority who shall have power to make an order requiring the dairyman not to supply any milk from the dairy until the order has been withdrawn. If the dairy from which the infected milk is supposed to come, is outside the district where the consumers are being infected the medical officer is to report to the Local Authority of the district in which the dairy is situated, and they are bound to send a medical officer and a veterinary surgeon to inspect and report.

In the Manchester Act the section dealing with milk is 19 and the more important clauses are :—

(4) Every dairyman who supplies milk within the city and has in his dairy any cow affected, or suspected of, or exhibiting signs of tuberculosis of the udder shall forthwith give written notice of the fact to the medical officer.

(3) Any person the milk of the cows in whose dairy is sold or suffered to be sold or used for human consumption within the city who after becoming aware that any cow in his dairy is suffering from tuberculosis of the udder keeps or permits to be kept such cow in any field, shed, or other premises along with other cows in milk shall be liable to a penalty not exceeding £5.

(6) (*a*) If milk from a dairy situate within the city is being sold . . . . . within the city, the medical officer or person authorised by him may, if accompanied by a properly qualified veterinary surgeon, at all reasonable hours enter the dairy and inspect the cows kept therein and if the medical officer or such person has reason to suspect that any cow is suffering from tuberculosis of the udder he may require the cow to be milked in his presence and may take samples of the milk. . . . . .

(*b*) This states that the report of the medical officer with respect to any cow having a tuberculous udder, shall be accompanied by the report furnished to him by the veterinary surgeon, and the corporation may then require the dairyman to attend and show cause why an order should not be made requiring him not to supply any milk from such dairy within the city.

(*c*) This clause is important, and is as follows :—If

the medical officer has reason to believe that milk from any dairy situate outside the city from which milk is being sold or suffered to be sold or used within the city is likely to cause tuberculosis in persons residing within the city, the powers conferred by this subsection may in all respects be exercised in the case of such dairy provided that the medical officer or other authorised person shall first have obtained from a justice, having jurisdiction in the place where the dairy is situate, an order authorising such entry and inspection.

In both these Acts the veterinary surgeon is specifically mentioned as *the* person to examine as to the health of dairy cows, and what the profession should demand, in the interests of both the public and the dairy owners, is that these powers should be applied generally in England.

Time forbids me to detail again the reasons making meat inspection necessary. Suffice to say that the law in England on this question is almost ludicrous. It fails to guard the public and it is most unjust in many cases to the butchers, while from the point of view of efficiency even where it is applied it utterly fails. The Parliamentary return of the previous occupations and callings of the persons employed as meat inspectors, called for by Mr. W. Field, M.P., shewed that no training or knowledge of pathology, nor even the technical knowledge of the butcher, was considered to be necessary in making these appointments, but that cab-drivers and policemen, and plumbers, and many other equally respectable callings qualified for the post of meat inspector. The condition of things is little better now; sanitary inspectors passing the examination of the Sanitary Institute in Meat Inspection are no doubt an improvement on men with no training at all, but meat inspection requires anatomical and pathological knowledge which is not gained in a few weeks casual observation in a slaughterhouse. Another most remarkable thing is that a veterinary inspector, as such, has no power to seize diseased meat, the only persons legally possessed of this power being the Medical Officer of Health and the Inspector of nuisances (Public Health Act, 1875, Sec. 116.) Thus to be able to act as a meat inspector and have power to seize diseased meat a veterinary surgeon must be appointed as inspector of nuisances. Here again some of the recent acts obtained by municipalities remove this disability from the veterinary surgeon, *e.g.*, in the Swansea Corporation Act of 1902, there is a clause as follows:—The Veterinary Inspector of the Corporation may exercise the powers of Section 116 (Powers of Medical Officer of Health to inspect meat, etc.) of the Public Health Act, 1875, in the same manner as the Medical Officer or the Inspector of Nuisances, and the Public Health Acts shall apply within the borough as if such such veterinary inspector were mentioned in the said section in addition to the medical officer and inspector of nuisances. The Public Health (Scotland) Act also gives the veterinary surgeon powers to act, and it makes him the sole person qualified to inspect live animals. It also protects the owner of an animal or carcase from any action under the Act if the animal or carcase was passed by a veterinary surgeon approved by the Local Authority, within a reasonable time prior to the seizure.

The veterinary profession can reasonably ask that these powers conferred on their members in one part of the United Kingdom should be made generally applicable to all parts of it; in fact the general public only need to be made aware of the valuable work that is being done by veterinary surgeons under some of the more progressive municipalities, and to understand in some measure the dangers of animal infection, to demand some adequate protection especially in the direction of inspection of meat and milk. Towards this end it is necessary that the power granted by the Public Health (Scotland) Act to Local Authorities of districts other than boroughs, to provide or maintain public slaughterhouses, should be extended to England.

In conclusion, after a very inadequate review of this important question may I suggest that the time has come for the institution of a veterinary sanitary service with a Veterinary Officer of Health, appointed by the Local Authority, acting in collobaration with the Medical Officer of Health, and approved by the Board of Agriculture. The duties of such an officer would include Dairy and Meat Inspection; the carrying out of the provisions of the Contagious Diseases (Animals) Act; the inspection of Fairs, Markets, etc., and such other duties as could properly be undertaken by a veterinary surgeon. Veterinary officers in towns should certainly be independent of private practice so as to avoid all clashing of interests—the interests of the community and the interests of a private client, and such a sanitary service would amply justify its existence by the work performed, and would also be a potent factor in the improving and uplifting of the profession.

An important suggestion was made at Manchester last year by Mr. Brittlebank, that as all the regulations with respect to meat and milk came from the Local Government Board they should retain some veterinary expert to advise the Board. This is very necessary in view of any organisation of State veterinary inspection.

Finally, as a profession, we must see to it that our members are fully qualified to undertake all the duties outlined above. Our prescribed course of study for students must not be allowed to fall behind modern requirements; our examination for the diploma of membership must be thorough and searching on these points; and we must endeavour by all means to gain and justify the confidence of the public. It would be well if the branch of the fellowship examination dealing with Veterinary Hygiene were made to include our duties as Public Health Officers, and now that the possibility of obtaining a University degree in veterinary medicine appears likely to be realised, I look forward with confidence to the institution of a chair of Veterinary Sanitary Science and Public Health in the near future. Our opportunity is coming, let us be ready to seize it when it comes.

Remember—"Laborare est Orare."

At the conclusion of the paper the applause was both general and prolonged.

Discussion.

The President said they were all exceedingly pleased with Professor Woodruff's able composition. It must have taken much care and time and study to put such a paper together, and now was the time to discuss it thoroughly.

Professor Pritchard said it was hardly within the capabilities of everyone to discuss such a complex problem. He had listened to Professor Woodruff with a great deal of pleasure and attention. He had evidently gone most carefully into subjects that did not come before them every day. Other points dealt with questions of more recent date, and one of them the study of bacteriology. We hear so much at the present day about microbes and bacteriology and their relation to the public health both human and animal—there was hardly a known disease now of which the microbe had not been discovered—that really one begins to ask—Is it all true? Really with the appalling array of microbes that were now represented to be waiting to take possession of both man and beast, it must be a relief to the human mind to at least be able to imagine a doubt as to some of their existence. He had always had in his mind since the first commencement of the discovery of microbes, one great point that he thought was very much lost sight of. If he were to throw down on the floor of the room in which they were assembled a handful of mustard

seed and then close and seal the room for say 50 years, when he reopened the room he would, in all probability, find that mustard seed just as he left it. But if, on the other hand, he threw that seed upon the green turf and it became soaked with the moisture it would germinate in 48 hours. And so he thought it was with both the human and animal system. If the soil is prepared to receive it, the seed will grow ; if the system of the body is predisposed to disease, or if you live under unhealthy conditions that microbe will flourish ; but if the system be healthy and the simple rules of nature be constantly observed then that microbe will perish, for there is no soil upon which he can feed and flourish.

Now with regard to the spread of glanders in horses. They all knew that that disease continually existed in London and other large towns, and that there was serious statistics of it at the present day. In his opinion one of the most facile means of spreading it was the common horse trough. If you stand outside one of the large railway stations in London where such troughs existed you would often see a dozen or more horses jostling each other's heads to get at the water. Now granted the theory that it is not probable a horse would become infected by swallowing the virus of glanders in the water, how about the animals rubbing noses? But recently he had been called in to attend a number of animals supposed to be affected with glanders, these animals had been tested with mallein and had responded to it, but he found that the stables were badly constructed, the drainage was bad, the ventilation was bad, the whole of the conditions in which the animals lived unsanitary. He suggested improvements, they were carried out, the drainage was thoroughly reconstructed, and under more favourable conditions of life those animals recovered, and he very much doubted in his own mind if they ever had glanders at all, *i.e.* to rely on mallein without clinical symptoms was a mistake. Again, with regard to tuberculosis, he had had considerable consultation or conversation with persons from foreign climes about this disease in particular, and he felt satisfied there were numbers of animals knocked down simply because they responded to the test of tuberculin. The question of rabies was too long and grave to enter into on this occasion, but he would only hint that on this subject as well as the others he had grave doubts.

Mr. PUGH said they were all indebted to Professor Woodruff for his very able paper. He was aware there were cases in which it was difficult to discover the origin or cause of the disease. In cases of diphtheria where the milk from certain cows had been blamed he had examined the animals, and inspected the dairies, and failed to find anything the matter with either. He knew of a bad case at a school—diphtheria broke out amongst the boys. Although the proprietor of the school had spent a large sum on its reconstruction, he closed the school and had the whole of the drainage relaid with every possible modern sanitary appliance. The school was re-opened and again diphtheria broke out. Every investigation possible was made without discovering the slightest clue to the cause till it occurred to an eminent medical practitioner to examine the boys, and then a boy was found with the bacillus of diphtheria in his throat, and he had no doubt disseminated the disease to the other boys. And yet that boy exhibited no clinical symptoms whatever.

Again, in an outbreak resembling influenza in a thoroughbred stud, one of them breaking a bloodvessel he made a post-mortem examination, with the result he discovered an unexpected cause, and not feeling satisfied submitted the parts to a professor who pronounced it to be . Again those animals known as wasters in cows do not usually show the existence of tuberculosis.

Mr. WILD said with regard to the inspection of dairies he lived in a neighbourhood that was specially adapted to this purpose, they were allowed to inspect twice a year, as a result of six inspections about two per cent. of the cattle were found to be affected, the owners were then simply notified that they must not use those animals for milking purposes. What happened? The poor struggling farmer of the present day could not afford to lose by his stock and he disposed of the suspected animals—sent them elsewhere. Now if there was a general system of dairy inspection all over the country this would not be possible, and the general public would benefit to a very considerable extent. He quite agreed with Professor Woodruff's opinion that there should be a special law to deal with the subject.

Mr. LIVESEY said in his last practice in the Midlands he came across anthrax pretty often—largely among cattle, but he knew of three deaths from it among human beings. The principal industry of the town in which he lived was carpet manufacture. The disease was imported in Persian wool, largely used for this purpose, which had to go through a system of washing in the course of manufacture. The water from these washings passed from the factories into the drains, thence to the sewage farm, and once there it was distributed over some acres of grazing land. The young stock feeding picked it up and so the contagion was repeated and kept alive, and would be so long as the sanitary authorities permitted the factory owners to pour the contagious liquid into the common drains. Some of the human cases were due to dust from the carpet making machines, others from bringing a sore or wound into contact with a defunct diseased animal, as in the process of skinning etc. With regard to the question of tuberculosis in cows, he was of Professor Woodruff's opinion —it was not always possible to say on brief examination to what extent the udder was diseased. There was no organised system of inspection. Cattle were passed on from hand to hand, and so eluded detection.

Mr. H. E. SMITH said he had been exceedingly pleased to listen to Professor Woodruff's able paper, but he must say at once he could not agree with the remarks of Professor Pritchard. He held a record of the application of tuberculin in 2,000 cases, and on every occasion when a post-mortem was made he had found tuberculosis existing in one form or the other. He was called to a residence the other day, found pigs suffering from tuberculosis ; tested the cows, found three with tuberculous udders ; in fact everything on the estate had tuberculosis more or less. He thought it they could only educate the public a little more as to the dangers resulting from a spread of this disease and the necessity for taking firm steps for its prevention they would not have half the trouble they now had in detecting and locating the disease. In conclusion he mentioned there was a meeting to be held shortly at Liverpool on the same subject as Prof. Woodruff's paper.

Mr. CHARLES related his experience with regard to tuberculosis when in the Midlands. There he came to the conclusion that 75 per cent. of the cows were infected with tuberculosis, and he reported accordingly, but the Urban and Rural Sanitary Authorities had their own little fads to carry out, and did not want to be disturbed by the announcement of a disease of which they had no knowledge. The great thing was to get general action all round. The practice of passing infected animals on by means of sale was pretty general ; you could not expect the struggling farmer to bear the burden.

He was once called to investigate the cause of the death of a Shire colt, two years old. He found the spleen infected with tuberculosis, and on further examination found every animal on the farm, including the fowls, tuberculous, and the owner also.

Mr. BAKER said he must tender a tribute of thanks to Professor Woodruff for the very interesting and able

paper he had read, but he must say he was personally very much opposed to the opinions expressed by Prof. Pritchard—he considered mallein and tuberculin both excellent agents. It had often occurred to him that it was possible to go too far either way. There was the question of blood-letting for instance. In the olden days they drew blood for everything, now it was hardly ever practiced; but were there not instances where the drawing of blood would be beneficial. The interesting part of Professor Woodruff's paper from a commercial point of view was his proposed amalgamation of the veterinary and surgical interests.

Mr. ROBERTS also thanked Professor Woodruff. There was no time left but just to touch on the salient points. He agreed with the idea of appointing veterinary surgeons as inspectors of dairies and meat stalls, and he thought they should be invested with full powers to prevent the sale of milk or animals. Anthrax was a most deadly poison, and he related incidents of its effect upon human beings that had come within the range of his experience. He thought the cause of much of the disease in animals was the importation of foreign grain or food stuffs, especially from countries where anthrax was known to exist. With regard to scarlatina and diphtheria being natural diseases of the cow, he should not like that to go forth from this meeting. He could not say but that the milk might become infected after it had left the cow, but that the cows themselves were ever infected with scarlatina or diphtheria he did not for one moment believe, and the idea of it has been the cause of many a dairyman suffering great loss without reason. Look how disease is allowed to be spread by the school children, and by tramps who journey from town to town.

Mr. J. FRASER said he had listened with great interest to Professor Woodruff and fully appreciated the value of his paper, it exhibited remarkable scientific knowledge in one so young, but he rather regretted that the Professor did not keep entirely to the title of his paper. What he complained of was that he did not go far enough and point out the reasons that made the propositions in his valuable paper fall short in their actuality. He (the speaker) had had much to do with the medical profession and he could not say that he had ever found medical men particularly sympathetic, therefore he thought that the veterinarian should be placed in the position where he could stand on his own legs. At Glasgow they had a medical man to inspect dairies, what did he know about cows? True, a veterinary surgeon was appointed to accompany him on his round of inspection, but only as a secondary personage.

Two years ago he (the speaker) advised the authorities of St. Albans to have all dairies regularly inspected —with satisfactory results.

The examination of milk was, he thought they would all grant, a very large order. Now soon after the City Council of St. Alban's had adopted this measure, the District Council followed suit, and this made the whole thing exceedingly effective, and this was what he wanted to point out with reference to Professor Woodruff's paper, that to carry out its suggestions effectively they wanted the whole system of dairy inspection combined in a perfect organisation, and it was to attain that end that they must continue to work vigorously. He could not sit down before he had entered a vigorous protest against the remarks made by Professor W. Pritchard. He should not like it to go forth from that meeting that such views had been suffered to pass unchallenged. If Professor Pritchard's allegations were correct what was the use of scientific research? For what end had the most scientific men laboured? Were they to admit that all the great discoveries of the past few years were simply a myth, and they were to return to the ignorance and superstition of the past. No; he believed tuberculin and mallein had both helped him in his work, and they should not cease to employ them in their examinations; therefore in the name of the meeting he wished most emphatically to express their disagreement with the remarks of Professor Pritchard.

Mr. J. T. KING returned his thanks to Professor Woodruff, and said he was glad to hear Mr. Fraser speak so decisively on the subject of the existence or non-existence of microbes, and he was entirely of his opinion. He would take this opportunity to congratulate the President on his position and on the large gathering of members and friends. It really seemed that the changes in the management of the Society had been beneficial.

Professor WOODRUFF replied briefly, thanking the meeting for the interest they had so warmly displayed in the subject of his paper. With regard to the remarks of Professor Pritchard, enough had been said. He had the utmost faith in mallein and tuberculin. He had not meant it to be understood that in his opinion it was possible that cows could be infected with scarlatina or diphtheria, but that such a belief had been promulgated by medical men—another proof that the linking of the veterinary and medical professions more closely would lead to beneficial interchanges of ideas.

The treatment of anthrax required revision; more stringent measures of sanitation, and the prevention of the distribution of the refuse from carpet and clothing factories over the surrounding country. If we could get a universal system of inspection, the same as now carried out in Scotland, it would effectually stop the system of passing on condemned animals from one district to another. There was no doubt that many cases of anthrax were imported in the foreign grain. The whole object of his paper was to show them that as a rule, in the Southern counties especially, the veterinary profession had been rather slack. In the large progressive municipalities in the north the value of veterinary science is fully recognised, and the faculty are granted extra powers and increased facility for action, and they should not rest till those powers and privileges had become universal over England.

ELECTION OF A SUB-COMMITTEE FOR THE REVISION OF RULES.

The following gentlemen were elected to form a sub-Committee for the revision of the rules of the Association: Messrs. C. Pack, J. A. Todd, J. Simpson, F. Spencer.

On the proposition of Mr. E. W. Baker, seconded by Mr. W. Pritchard, it was resolved that the next meeting of the Association should be held in London.

SHOULD VETERINARY SURGEONS BE LIABLE TO SERVE ON JURIES.

Mr. E. W. BAKER produced a news-cutting in which it was stated that according to the decision of the majority of the judges who considered the point in Dublin, a veterinary surgeon is a medical practitioner, and as such entitled to exemption from jury service. Mr. Baker wished to be informed if this decision of the Irish judges would apply in England. Since he had been practising at Wimborne he had been summoned on the juries three or four times to the disorganisation of his practice and consequent loss to himself. He was informed that a controversy on the subject was now going on, and that in the previous issue of *The Veterinary Record* there was already a report on the subject.

On the motion of Mr. W. K. Stewart, seconded by Professor Pritchard, a hearty vote of thanks was accorded the President (Mr. Charles Pack) for so ably conducting the meeting, and he having briefly replied, an adjournment to the dining room was speedily made.

Royal College of Veterinary Surgeons.

SPECIAL MEETING.

A meeting of the Council of the College was held at 10 Red Lion Square, W.C., on Thursday, July 2nd, 1903, Professor W. O. Williams in the chair. There were present: Col. Duck, Prof. Dewar, Prof. McFadyean, Prof. McI. McCall, Prof. Mettam; Messrs. Abson, Allen, Bower, Byrne, Dollar, Fraser, Lawson, Mason, McKinna, Mulvey, Over, Shipley, Simpson, Trigger, Wartnaby, Wragg and Mr. A. W. Hill, Secretary.

The SECRETARY read the notice convening the meeting.

Mr. JAMES SIMPSON said: I rise with peculiar pleasure and, I may say, with some confidence, to submit a resolution to the Members of the Council with reference to the first subject on the agenda. We have, during the past year, had as our President—and I think I may say it without causing any jealousy in the minds of those who have passed through that office—a somewhat exceptional gentleman. Considering the great distance that our President lives from this Institution, he has taken an immense amount of trouble to attend to the business of this College. I have been associated with him in many things during his presidential year, and I made a rough calculation of the number of miles that our President must have travelled in order to attend the business of this Council as President, and I reckon that he has thus travelled not less than 10,000 miles. And apart from the travelling there is the loss of time, and he has given us his time without stint. Then again, we have to take into consideration the work that he has done when he has been at this Council Chamber or when he has been at his own home perfecting schemes which have been suggested in this room. You will remember that when statements were made somewhat broadcast with reference to the part played by veterinary surgeons in connection with what were called "Remount scandals," our President, very wisely I think, called a special meeting. The result of that meeting is fresh in the minds of everybody. It cleared up the whole matter, and the veterinary profession was freed from that suspicion and stigma which some of the public were inclined to attach to it before that meeting. We have enjoyed this year a very peaceful year; our President has, through his kindness and courtesy to every speaker, enabled the business to be carried on perfectly pleasantly and satisfactorily. I think I may say without fear that had it not been for our President the War Office Committee would not have been appointed, at any rate as early as it was—late as that was. There is a long agenda before us, and I do not propose to say any more to you with reference to the qualifications of Professor Williams to be President, but I do think that if you appreciate, as I do, the services rendered to this College by him during the past year, you have an opportunity of expressing your opinion; and the only way in which I think you can express it is to re-elect him President for the coming year. (Applause.) I have very much pleasure in proposing that Professor Williams be asked to accept the honorary position of President of this College for one more year.

Mr. F. W. WRAGG: I have much pleasure in seconding this motion, and I support all that has been said by Mr. Simpson.

Mr. TRIGGER: I have very great pleasure in supporting the resolution. It was my privilege last year to nominate Professor Williams as President for the ensuing year, and I then ventured to predict that he would make us a very excellent president. I leave it to the Council to say whether that has been fulfilled. I believe that Professor Williams has exceeded all our anticipations, and I am satisfied that we have not had a more able president in the chair for very many years. He has never spared time or trouble and he has not considered himself in any way when the interests of the profession have been at stake. I think what Mr. Simpson has said is no exaggeration, that Professor Williams has travelled during the past year over 10,000 miles in our service, and, I believe, has given 34 or 36 actual working days to the interests of our profession. That is an exceptional record, and it justifies us, I think, in asking the Council to give Professor Williams another year, on the grounds that we are hoping he will have a less assiduous year than that which has passed. He has had a year of very hard work; let him now have a year of less onerous work, especially as there are several matters which are not yet carried through. At the risk of detaining you for a moment or two, I wish to make a statement which I have made very many times in public and which I say without any hesitation as one who has passed through the Presidency, and I know it is the opinion of others who have passed the Chair, and that is, that it is not a bad precedent to elect a gentleman to the office for two years. I hope when we have a new Charter that will be provided for, and I say it without any exception in reference to the gentlemen who are sitting around me, for we should agree to any of them sitting for two years. Because, a man on taking the chair to-day has three more quarterly meetings, and by the time he is getting into touch with the office he is out of the chair again and his tenure is ended. I say without hesitation that I hope when we have a new Charter, as we must have in a few years, that will be one of the clauses we shall ask for, that the President shall sit for two years. There is no gentleman sitting round this table that I take exception to when I make these remarks. I think Principal Williams is justly entitled to this honour. It is an exceptional year that he has passed through, and we are fairly entitled to suggest that he should have one more year. (Applause).

Professor MACFADYEAN: I propose to take a course of action which I am fully aware is open to misconstruction. I listened with much interest to what fell from Mr. James Simpson, and I think I should be prepared to endorse practically everything he said except the last sentence. I am not prepared to admit that because I cannot support the proposition which he made, therefore I am unappreciative of the way in which our present President has discharged the duties of the office during the year. But, at the same time, I feel it my duty to submit to the Council another name. I beg to move that we elect to the office of President for the ensuing year Mr. John A. W. Dollar. As I said a minute ago, I am not going to dissent from anything that has fallen from previous speakers, except the one sentence of Mr. James Simpson to which I have already taken exception. But after all it is well known to members of this Council that the proposal which emanated from Mr. Simpson, and which has received the support of two other speakers, is of a highly exceptional nature. So I think I am correct in saying that since the time of Dr. Fleming no one has been invited to occupy the Presidential Chair two years in succession. And I am rather alarmed at the suggestion which has fallen from Mr. Trigger that we should, when we get a new Charter, ask that one of the provisions of it shall be that the Presidents shall hold office for two years. I venture to think that there are, sitting around this Council table, members who will not approve of that, and who will disapprove of the present proposal as likely to create precedents in that direction. The office of President is one of very great honour and it is one that ought not to be lightly disposed of, and if everybody is to be elected to the office of President for two years it is perfectly obvious that many of those who attain to the position of minor honour, namely, a seat on this Council, will never fill the office of President. However, as has been remarked, we have a long agenda, and

I do not propose to detain the Council much longer. It would be hypocrisy to pretend that we shall be unanimous in this matter, though I am sure we feel it would have been desirable. Also, it can hardly be necessary for me to say very much, if anything, to the Council with regard to Mr. Dollar's fitness to fill the Presidential Chair, but I might be permitted to point out that if length of service on this Council establishes any title to be a candidate for the office of President then Mr. Dollar has that title. I believe I am correct in saying that with one exception there is no member of the Council who has served longer and who has not yet filled the Presidential Chair. If one were to maintain that anybody who had served a particular time on the Council might aspire to filling the chair in a mechanical way I should say it is Mr. Dollar's turn, but I do not put it on that ground; I put it on the ground that Mr. Dollar is a man who, in virtue of what he has done for the profession and all that he has attempted to do, is known throughout the length and breadth of the land. As regards his own personal qualification, I venture to say he is eminently fitted to be elected our President, and I have every confidence that, if elected, he will discharge his duties with credit to himself and to the satisfaction of the profession.

Professor METTAM: The present President is a personal friend of mine, and Mr. Dollar is also a friend. I have the honour of seconding the resolution that Mr. Dollar be elected President. I have known Mr. Dollar for some time and I must express great admiration for his opinions. I think, furthermore, that Mr. Dollar, by virtue of the experience he has gained here, and being one of the elected of the profession, is suitable for the post, and I maintain it is the legitimate aspiration of every member who is elected to this Council that he should aspire to the chair. I think if two years is to be the presidential term some of us, myself for instance, will be long before reaching the chair, not that I am aspiring to it now, because I prefer to first get the experience which Mr. Dollar has. I have therefore great pleasure in supporting this nomination by Professor M'Fadyean and seconding the proposition that Mr. Dollar be elected President for the ensuing year.

A vote by ballot resulted as follows:

Professor Williams	15
Mr. Dollar	11

and the declaration was enthusiastically received.

The PRESIDENT: I have to thank you most sincerely for this further honour which you have bestowed upon me. I may say that the only reason I consented to stand for re-election is that I am particularly anxious that we should carry through the work which we have in hand with the War Office. I felt sure that if you had a new steersman at the present moment, while these negotiations are going on, that there might be a danger of the ship getting on the rocks. We have had a lot of very delicate negotiations with these people. At the same time I may say that I trust that the individual members of the profession will not by "pin pricks" irritate the officials of the War Office. (Hear, hear.) It is always considered correct to take no notice of things which are *sub judice*, and that is the position of our case at the present time; it is under judgement by the War Office. I trust from what I heard this morning, that it will not be long before we have the verdict. If the verdict be unfavourable, then will be the time for us to do all we please to annoy the War Office on account of their attitude in regard to the advancement of veterinary surgeons. Until then I think it would be unwise to do so. And that is my particular reason for consenting to stand again, contrary to the usual custom of presidents in this Chair. I regret that the coming year will not be one of ease and honour. No doubt it will be a year of honour, but I foresee some more hard struggles for this Council to try and get through. I trust that it will be as successful in the future year as it has been in that just passed.

VICE PRESIDENTS.

The following gentlemen were elected: Mr. Allen, Mr. Carter. Professor Mettam, Mr. Simpson, Professor Dewar, Mr. Banham.

ELECTION OF HON. TREASURER.

Mr. MULVEY: It falls to me, and I have peculiar pleasure in doing so, to propose that our old friend Mr. Wragg be re-elected to the office in which he has served so many years with credit to himself and with honour to his Council.

Mr. LAWSON: I second that with pleasure. Mr. Wragg always insists that everybody looks through the accounts in a proper manner. On one occasion he said that the bills had not received the usual scrutiny, so they had to be re-opened and brought before us again. That shows what Mr. Wragg is.—Carried.

Mr. WRAGG: I thank you, gentlemen, for the kind manner in which you have put me in that position again. My friends have spoken so nicely about me that I cannot refrain from thanking them.

SECRETARY.

The PRESIDENT: The next business is to appoint a Secretary and Registrar. I have much pleasure in proposing from the chair the re-appointment of Mr. A. W. Hill, who has so ably done the work of the College for the last 22 years.

Prof. McI. McCALL: I second that.—Carried.

Mr. A. W. HILL: I have to thank you, gentlemen, for the honour, and you, sir, and Mr. McCall, for your kind words.

The PRESIDENT: That terminates the Special meeting of Council. We now come to the Quarterly meeting.

QUARTERLY MEETING.

Prof. W. O. Williams, President, in the chair; Col. Duck, Prof. Dewar, Prof. M'Fadyean, Prof. McI. McCall, Prof. Mettam, Prof. Shave, and Messrs. Abson, Allen, Banham, Barrett, Bower, Byrne, Dollar, Fraser, Lawson, Mason, McKinna, Mulvey, Over, Shipley, Simpson, Trigger, Wartnaby, Wragg, and Mr. A. W. Hill, Secretary.

MINUTES.

Mr. SIMPSON: If these minutes have been published, I beg to propose that they be taken as read.

Mr. MCKINNA: I second that.—Carried.

Mr. SIMPSON: I now propose that they be confirmed.

Mr. WRAGG: There is a mistake in those minutes. In the discussion on the Farriers' Company I am stated to have seconded the amendment of Mr. Simpson, whereas I proposed the original proposition.

Mr. SIMPSON: Yes, you withdrew yours in favour of mine, Mr. Wragg.

The PRESIDENT: Is it agreeable to you, gentlemen, that that correction be made?—Carried.

COLLEGE PREMISES "RIGHT OF WAY."

The PRESIDENT: I have now to announce to you that the Secretary, in due form, has passed through our back entrance with a sack of coals and a shovel, which entitles us to walk through the back door; it preserves our right of way. It is necessary that this should be done and entered on the minutes.

OBITUARY.

The SECRETARY read the obituary list.

Mr. TRIGGER: Mr. President, sad as the obituary list is to-day, there is one death on that roll which, I am sure, caused the deepest pang of regret and sympathy in every member of this Council. If I venture to arrogate to myself the proposal of a resolution of sympathy and regret it is not because I can hope to do justice to his

memory so well as other members of this Council perhaps would have done, but I can claim that in his professional career I have had a longer acquaintance with him than has any other member of this Board. Harry Olver and myself entered the College gates at the same moment, signed the entrance book next to each other, and from that day we always kept together at the examinations. I enjoyed his unbroken friendship, without one single ripple. I know few men whom I would more regret to lose, and whose example I look upon as a greater incentive in the veterinary profession, and there are few men who should be more earnestly copied by those who enter the profession. Always a gentleman, and always having at heart the interests of the profession at large, incapable of doing an injustice or anything which was not absolutely honourable and straightforward, we have lost in him a distinguished friend and colleague. Though a comparatively young man, he was a senior member of the Board of Examiners. It is in connection with that position chiefly that we have to mourn his decease to-day. The many positions which he filled redound greatly to his honour, and I move that we express our deep sympathy with the widow and family of the late Mr. Olver, and regret the loss of so distinguished a colleague and so able an examiner; and that the same be recorded on the minutes of this meeting.

Mr. MULVEY: It is with sincere regret that I second the proposition made by Mr. Trigger. I endorse all that has been said with regard to Mr. Olver in his professional and private capacities, and I beg, sir, to second the proposal that this Council do send a letter of regret and sympathy to the widow and family.

The PRESIDENT: Before putting this proposition before the Council I should like to add one word from the Chair to the deep sympathy that has been expressed, not only by the Council, but by the profession generally, and by a body of men who, as a rule, are not in sympathy with the examiners, that is, by the students. The students of the College felt the loss of Mr. Olver very deeply indeed, because they knew that when they went before him they would have perfect justice dealt out to them by a gentleman. They had no fear of him; they were not afraid of being bullied or upset, and they knew that whatever they told him they would have full credit for. When I heard of his sad death I thought it my duty as your representative to send a wreath to be placed on the coffin, and also to attend the funeral in person, which I did. And I may say that I have never attended a funeral in which I saw so much marked sympathy by all the people. The shops were closed, the streets were lined with people, and everybody in Tamworth and the neighbourhood seemed to be in mourning for the loss of a friend.

Mr. ALLEN supported the resolution, which was carried in silence, the members of the Council upstanding.

THE PRESIDENTIAL ROBE.

The PRESIDENT: A request was made to me this morning that I would permit a breach of the ordinary rules of procedure. I informed the member of Council that he would have to refer to whoever was in the chair, not knowing I should be in it. Some time ago it was determined by the members of Council that they should continue to clothe themselves with more or less dignity. Mr. Shipley and Mr. Dollar have taken a great deal of trouble in obtaining a robe, with which they purpose clothing their President. Even though the weather is hot I shall be prepared to wear the robe, which will not be so much a burden as it will an honour. With your permission I will suspend the Standing Orders and call upon Mr. Shipley to produce this emblem of dignity.

Mr. SHIPLEY: When Professor Williams kindly gave the mace to this College he said he felt there was nothing to indicate the position of the Roya College of Veterinary Surgeons. It was suggested by several members that we might adorn our President with a robe. I wrote to all the members of the Council, and they have been practically unanimous in agreeing with this proposal, and Professor Williams has kindly consented to wear it. I hope he will allow me to put it on him.

The President then assumed the robe amid much applause.

On the proposition of Mr. Simpson, a vote of thanks to Mr. Shipley and Mr. Dollar was carried for their trouble in procuring the robe.

CORRESPONDENCE.

The SECRETARY stated that he had written to Mrs. Olver, at the request of the President, expressing sympathy with her on the death of her husband, and saying it would be his duty to bring the subject before the Council that day. Mrs. Olver had replied in appreciative terms.

A letter had also been received from Mr. R. Rutherford, Secretary to the Board of Examiners for Scotland, intimating his intention of resigning the office, and requesting that his son might be appointed in his stead. The President then called upon Mr. Rutherford, after which he wrote a second letter agreeing to continue the office if his son could be appointed his assistant.

A letter was also read from Mr. Lionel Stroud, Hon. Secretary of the Central Veterinary Medical Society, enclosing copy of a resolution which had been forwarded to the War Office on the subject of the Army Veterinary Department. The letter was acknowledged.

Mr. MULVEY: I propose that the letter lie on the table.

Mr. TRIGGER: I second that. I think it should be left to us to communicate with the War Office if that is necessary.

The PRESIDENT: They have sent that resolution to the War Office, and they have sent us a copy to let us know what they have done.

Mr. MULVEY: I think they have made a great mistake.

Prof. PENBERTHY: I think we should not express any opinion upon it; simply receive the letter and lay it upon the table.—Carried.

PRESENTATIONS TO THE LIBRARY.

The SECRETARY read the list of donations to the library, and the donors were duly thanked.

Mr. TRIGGER: I do not think the vote should include those who sent instrument catalogues. I refer to the matter simply on a question of precedent.

Mr. SIMPSON: I do not think it is inappropriate to receive it; it is a nicely got up thing.

THE WORSHIPFUL COMPANY OF FARRIERS.

The PRESIDENT: The next item on the agenda is "The Council to resolve itself into Committee in *re* letter from the Worshipful Company of Farriers." At the last meeting of the Council it was proposed, seconded, and carried that this Council resolve itself into Committee to discuss this letter from the Worshipful Company of Farriers. This is now a committee of the whole Council. The question arises whether shorthand notes of the proceedings shall be taken.

It was agreed that shorthand notes be taken of the deliberations of the private meeting, the notes to be rendered to the Council only, if ordered.

The Council then resolved itself into a private meeting.

On the re-constitution of the Council,

The PRESIDENT said: The next item is to discuss the resignation of Mr. R. Rutherford. Mr. Rutherford wrote resigning his position. I saw him and asked him if he had any special reason. He said he was getting

old, and it was pretty hard work running up and down stairs. I suggested that he was a valuable servant and that he should reconsider the matter, and ask the Council for an assistant to help him in the heavy part of his work, he himself to continue the responsible part of the work. He has written a further letter asking that his son be appointed his assistant.

Prof. PENBERTHY: What have we before us?—a resignation?

The PRESIDENT: There is a resignation, and then a withdrawal of the resignation.

Mr. SIMPSON: If it could be made clear that Mr. Rutherford, Junr., does not desire a salary our course is pretty clear. Can you, sir, from your interview with Mr. Rutherford, say whether it is to be an honorary post?

Mr. TRIGGER: I move that Mr. Rutherford have an honorary assistant, and that his son be his honorary assistant.

Mr. SIMPSON: I second it. That was what I was about to propose.

Mr. SHIPLEY: I would move an amendment to that. We have a secretary here and an assistant secretary, we have a secretary in Scotland, and we are now going to appoint an assistant secretary there. We have also a secretary in Ireland, and I think it is time the Council took into consideration the duties which the secretaries have to perform. We have no end of officials appointed one after another, and I think a sub-committee should be formed to consider the duties of the secretary and report to the next meeting.

Prof. M'FADYEAN: Where do we stand? Has Mr. Rutherford gone out of office?

The PRESIDENT: He first of all resigned, and then wrote a letter.

Prof. M'FADYEAN: I believe his appointment is an annual one?

The PRESIDENT: He has not gone, he is elected in October.

Mr. WRAGG: I move an amendment, that as it is a question of finance, the Finance Committee report to the Council at their next meeting.

Mr. MULVEY: He cannot go out of office until next October.

Mr. SIMPSON: If we were not already acquainted with the duties of the secretary, both in England and in Scotland and in Ireland, I would say by all means refer it to a committee, but I see no possible benefit likely to arise from referring this to a committee.

The PRESIDENT: It is proposed by Mr. Trigger, and seconded by Mr. Simpson, that Mr. Rutherford's resignation be not accepted, but that he be requested to appoint an honorary assistant.

Prof. M'FADYEAN: The Council have no objection to appointing his son as unpaid assistant.

Prof. METTAM: The matter does not come forward until his period of office has expired. He is Secretary to the examiners until December. He has to be re-appointed in October.

Prof. PENBERTHY: Let him have his son as assistant for three months.

Mr. SIMPSON: Communications have to pass between the Secretary for Scotland and the general secretary between now and October.

The PRESIDENT: The motion is that the Council is agreeable to Mr. Rutherford appointing his son as hon. assistant secretary until October.—Carried.

Mr. TRIGGER read the report, from which it appeared that the question of publishing an additional 100 copies of the Register was recommended to be allowed to remain in abeyance. It recommended payment of wreath for the funeral of the late Mr. Olver, and thanked the President of the College for representing the profession at the funeral. Mr. Trigger concluded by moving the adoption of the report.

Prof. PENBERTHY seconded, and it was carried

REGISTRATION COMMITTEE.

Mr. SIMPSON read the report of the Registration Committee, from which it appeared that Mr. Bidlake applied for a certificate on the ground that he had lost his diploma, and this was granted. The committee recommended the restoration to the Register of the names of H. H. Aldred and J. W. Pollock, which had been removed from the Register in consequence of non-compliance with section v., sub-section 4, of the Act. In case 1265 the person complained of appeared before the committee, and it was decided that he be called upon to apologise to the Council for having sent an open communication in offensive terms to a client. The apology was given. Several cases were referred back for further enquiry. The committee recommended the prosecution of an unqualified person representing himself as a veterinary surgeon, and another person for using the letters "M.R.C.V.S." and the words "Veterinary Surgeon." Mr. Simpson moved the reception of the report.

Mr. MULVEY: I second that.—Carried.

Mr. SIMPSON: I now move that, in accordance with the recommendation of the Committee, authority be given for prosecutions in the case of the two persons referred to in the report.

Mr. FRASER: I second that.—Agreed.

EXAMINATION SUB-COMMITTEE.

Mr. MULVEY read this report, which pointed out that letters were considered bearing upon the controversy between Prof. Dewar and Mr. Somerville. The Committee recommended that no action be taken by the College, and the further consideration of the agenda was adjourned. Mr. Mulvey moved the adoption of the report, and it was received and adopted after being seconded by Mr. Mason.

EXAMINATION COMMITTEE.

Mr. MULVEY read this report. Letters were received by the Committee from gentlemen applying for posts of examiners, and acknowledged.

The report of Mr. Rutherford of the examination in Scotland was read, from which it appeared that one examiner expressed dissatisfaction with the subjects provided at the New Veterinary College. Professor Williams pointed out that it was the duty of the Secretary of the Board of Examiners to provide specimens, and not the College authorities. It appeared from the delegates' report that two students had been guilty of copying at the written examination on May 15th, and were disqualified from the rest of the examination. After hearing the evidence of delegates who were in attendance, and reading letters of regret and apology from the candidates so disqualified, the Committee recommended to the Council that the students be allowed to present themselves at the examination in Dublin in July. The delegate also reported that the examiners had stated to him that many of the written papers showed evidence of defective education. The committee recommended that the examiners be instructed to earmark papers presented at the examinations, commencing Christmas next, which exhibited a defective knowledge of the English language.

A complaint was made that a Professor of Pathology occupied a seat between the examiners at the May examinations in Scotland, and gave visible expressions as to the replies made by the students. It was decided to ask the Professor to furnish an explanation. Educational certificates for examination in Class A were accepted with the exception of No. 323 which was rejected in consequence of the absence of Euclid as a subject.

A letter was read from Mr. Pilkington, of Johannesburg, as to the formation of an Association to obtain

recognition and protection of properly qualified veterinary surgeons in the Transvaal, and asking for directions as to the standard of qualification. The solicitor reported that there was no law in Cape Colony, the Orange River Colony, or the Transvaal to prevent anyone practising veterinary surgery, but that in Natal registration was necessary. The committee recommended that a copy of the Register of the Royal College of Veterinary Surgeons be sent to Mr. Pilkington with expression of the opinion that the standard of the Royal College should be the minimum qualification.

Mr. MULVEY moved that the Report be adopted, and desired to express the indebtedness of the Committee to Mr. Thatcher for the very lucid report he had presented.

Mr. WRAGG: I second that.

Professor McI. McCALL: In connection with that there is one point I wish to bring before the notice of the members of the Council, and that is the fact of two students in the examination in May having been detected copying. It is proposed by the Committee that those students should be allowed to come up for examination in Dublin at the next examination. I take exception to that because, according to our present bye-law, no rejected student shall be eligible for re-examination at an interval of less than ten weeks between the dates of rejection and re-examination.

The PRESIDENT: These are cases of suspension, not rejection.

Mr. SIMPSON: They are not rejected, they had not been up, except at the written; they were at once disqualified.

Prof. McI. McCALL: That is the point I want to have made clear. If a man is up for examination and he fails to get through he is rejected, he is debarred for some reason or other.

Prof. MACFADYEAN: I think it is right to apply the term disqualified.

Mr. FRASER: There are two points I do not understand. If these students were detected copying and had their examinations postponed until the next examination in Dublin, what becomes of the written papers? Will they be the same papers as were presented to them at their last examination? Or how do they get over the written examinations if they have been copying?

The PRESIDENT: It will be an entirely fresh examination.

Mr. FRASER: The next point is that in the Report you use the word "delegate" in the singular. Has there been only one delegate?

Mr. SIMPSON: Yes, only one.

Mr. FRASER: How can he do the work alone?

The President: The examination is conducted by the Secretary, and one delegate is present.

Mr. FRASER: When I took a share in examinations I found three delegates little enough. I do not see how one delegate can do it.

The SECRETARY: Mr. Robb superintends the Glasgow one, and Mr. Rutherford attends the Scotch.

The PRESIDENT: Is there any amendment on the adoption of the Report?

Prof. McI. McCALL: I say that these students should not be allowed to reappear for examination until after the expiration of ten weeks.

The PRESIDENT: Does anyone support that amendment.

Mr. TRIGGER: I support the resolution, although I think we are dealing leniently with these students; but I take into consideration the fact that they have apologised. I hope future similar cases will not be dealt with so leniently.

The Report was carried.

PUBLICATION COMMITTEE.

The SECRETARY read the Report. This recommended the acceptance of Messrs. Tindall and Cox's estimate, and that terms be conditionally entered into between that firm and the President and Treasurer of the Council.

Mr. TRIGGER: I must challenge that. I am not a member of that Committee, but I understood this morning at the meeting of the Finance Committee that we specially adjourned an item of business awaiting the result of the Publication Committee's meeting. The resolution was that it was subject to the Publication Committee approving of the advertisements, but there is nothing said about that.

The PRESIDENT: It is rather irregular, but I think I would be justified in making a statement here. It was found that there was a loss of some £30 odd on the publication of the Register every year, and the more copies we sold the heavier was our loss. It is very unsatisfactory, and I was asked to see if some better method could be adopted. I asked for an offer for the publication of the Register, and they agreed to publish it at 2s. 6d. per copy, we lending them our type, They also asked permission to insert advertisements at the beginning and the end of the Register. The Publication Committee approves of their estimate, but makes the condition that the advertisements must be submitted to the Committee of the College for its approval.

Mr. TRIGGER: But the minutes say nothing about that.

The PRESIDENT: No, because it was left to the Chairman, whoever he might be, and Treasurer, after hearing the full report of the discussion, but Messrs. Bailliere, Tindall, and Cox will supply these copies to all and sundry at 2s. 6d. each, and the Council will not have to pay more than £6 10s. for all the copies it requires. Tindall and Cox require a five years engagement, and it is for the Council to say whether they are agreeable to that.

Prof. M'FADYEAN: I feel bound to disapprove of this particular recommendation of the Publication Committee. In common with all other members of the Council I can see the necessity which is imposed upon us of endeavouring to reduce our expenditure in connection with the publication of the Register; but it seems to me we ought to think twice before we sanction the insertion of advertisements in our Register. Speaking on the subject without having had time for consideration, I am strongly of opinion that we ought not to sanction that proposal. I therefore move that the Report of the Publication Committee be referred back to them, the Council refusing to sanction the insertion of advertisements in their Register, the Committee to make the best arrangements they can with the understanding that there are not to be advertisements in the Register.

Mr. FRASER: I take it that Professor M'Fadyean keeps before his mind the fact that we are making a serious loss on the publication of the Register every year; and when you remember the condition that our finances are in, it is for us to consider well before we lose £40 a year on the Register. As to advertisements, I suppose the Report mentions that the advertisements are to be such as are approved.

Prof. M'FADYEAN: It is that I object to; that this Council should have to scrutinise advertisements sent for this Register.

Mr. FRASER: The number of pages required for this purpose would be 10 in front of the book and 10 at the back, which would not add much to the bulk, but would relieve us entirely of the loss which we sustain year by year. I cannot understand the value of Professor M'Fadyean's argument, that he objects to our supervision. As we looked upon it last night in Committee, we keep out of the book any advertisements to which we could reasonably object. If the Council thinks it would be wise to continue sustaining the loss, good and well. We did our best to avoid the loss, and the

suggestion we make to-day is the one we arrived at.

Mr. SIMPSON: You will agree that when the suggestion of advertisements was made to the Publication Committee on a superficial view we all seemed to object to it, and to anything like advertisements being inserted in our Register, but when I subsequently proposed a resolution with the view of assisting our finances, that advertisements should be inserted, thus saving us a lot of money by allowing the publisher to obtain payment for these advertisements, that course commended itself pretty generally to all who were present. It must be borne in mind that already we have advertisements in our present Register—not paid advertisements, but I turn to page 350 and I notice that all schools are mentioned there.

Prof. M'FADYEAN: They are not paid for, and are not inserted there by the desire of the schools.

The PRESIDENT: One school would much prefer that all the other schools were left out.

Prof. M'FADYEAN: My hesitation about answering was not because I had not an answer, but I think this is not the place for the answer, it is not really relevant. I do not care about any advertisements at all.

Mr. SIMPSON: I think it does want a good deal of consideration before we consent to have advertisements in. It was simply a little by-play of mine with regard to the schools. But surely it is necessary that these schools should have an intimation in our Register, it is useful for parents and guardians. If we adopt the precaution of having advertisements referred to the Advertisement Committee before they appear in the book we shall be right. I hope in the end Prof. M'Fadyean will withdraw his objection to it. It will save us a good deal of money, and the Committee can take care that nothing of an offensive kind is inserted.

Prof. M'FADYEAN: What estimates have been obtained other than the one from Bailliere, Tindall, and Cox?

Mr. SIMPSON: None.

Mr. FRASER: Yes, we had two others.

The PRESIDENT: I must be permitted, as a member of the Committee, to correct Mr. Simpson. We had the original charges from Adlard's as printers, we had an estimate from Skinner and Co. as printers, and we had an estimate from Bailliere, Tindall, and Cox as printers and publishers. We set the three things together. We found Adlards' charges very excessive, it would cost us £30 a year, and the more copies sold the greater would be the loss. Skinner and Co. offered to print 250 copies for £16 10s., without any corrections, and they, estimated that corrections would cost about £10 a year bringing it up to £26 a year for 250 copies. We found that if we printed it ourselves we should have to become our own publishers, that we should have to become municipal traders in a way that we did not consider advisable. We thought our least loss would be by giving the printing and publishing risk and everything to Bailliere, Tindall and Cox, and getting all our own copies for £6 10s. every year.

Prof. M'FADYEAN: I am obliged for the explanation, but I take it that the Committee did not think the Committee were going to do this without profit. And one of the things I would ask the Publication Committee to consider is whether, if advertisements are inserted, we may not as well have the profit of the advertisements ourselves. The first point I object to is having advertisements at all, but if we are to have them let us have the advantage of them.

The PRESIDENT: I would point out to you that the Register is published at 2/6. No printer or publisher can publish a volume of that size, on that paper, and with a binding for 2/6. Our endeavour is to keep the price at 2/6. The price of such a book as that would be 3/6 to 4/- at the least. We want to put it on the market to our own members at 2/6 to encourage them to buy it. If we like, as a Council, to publish it at 4/- or 5/- we can do so without advertisements, and if we sell copies we can make a profit.

Prof. M'FADYEAN: We could make a large profit by taking advertisments.

The PRESIDENT: By increasing the price of the book.

Prof. M'FADYEAN: By keeping it at 2/6. If we are to have advertisements we can have the advantage of them.

The PRESIDENT: It is proposed by Prof. M'Fadyean that the Report be re-committed to be further discussed, and to obtain an estimation without advertisements.

Mr. FRASER: We have got estimates without them.

Prof. M'FADYEAN: It is quite likely we might get 100 pages of advertisements, or say 50. My point is that these 50 pages would not greatly add to the publishing price, but would bring us in £100, probably more. Without hesitation I say if you will allow me to run the thing and have legitimate advertisements I will not only save the Council the whole outlay, but will make them a profit.

Prof. PENBERTHY: I take it that Prof. M'Fadyean should be allowed to publish it.

Prof. DEWAR: I wish to speak against having advertisements in the Register. It is a most delicate thing for any Committee to supervise these advertisements, and I would not have the advertisements in our Register; I would rather subscribe something to help make up the loss which our Council has had.

The PRESIDENT: I take it that Prof. Dewar supports the proposal to re-commit back the estimates so that others may be obtained exclusive of advertisements.—Carried.

COMMITTEE *re* MEMORIAL TO VETERINARY OFFICERS AND C.V.S. WHO DIED IN SOUTH AFRICA.

The SECRETARY read the report of this Committee, which recommended that a brass tablet in memory of those who fell in the South African War be placed in the Council Chamber for the sum of about £10.

Prof. DEWAR: May we have read out the names of those from whom subscriptions have been received?

The SECRETARY read the list.

It was agreed to refer the report back for the insertion of a particular name, but the idea that a tablet be affixed was approved, the cost to be about £10.

COMMITTEE *re* FEES TO VETERINARY WITNESSES IN METROPOLITAN POLICE COURTS.

The SECRETARY read the report of this Committee, which recommended the Council to advise metropolitan practitioners to decline to give professional evidence in police courts for less than a guinea fee.

Prof. PENBERTHY proposed, and Mr. Bower seconded, the adoption of the report, the former replying to a question that it was a pious opinion, and that he need only answer on questions of fact if he were only paid half-a-guinea.—Carried.

(To be continued)

Personal.

President John W. Springer, of the National Live Stock Association of America, has reappointed Mr. W. H. Dalrymple, M.R.C.V.S., of the Louisiana State University, Baton Rouge, U.S.A., a member both of the Executive Committee and the Committee on Sanitary Measures of that Association for 1903.

MILLER.—At Port of Spain, Trinidad, B.W.I., on June 13th, the wife of James Duncan Miller, Government Veterinary Surgeon, a son.

DISEASES OF ANIMALS ACTS 1894 & 1896.

SUMMARY OF RETURNS, WEEK ENDING JULY 4, 1903.

Period.	Anthrax.		Foot-and-Mouth Disease.		Glanders (including Farcy)		Rabies.		Swine Fever.	
							Cases Confirmed.			
	Outbreaks	Animals Attacked.	Outbreaks.	Animals Attacked.	Outbreaks.	Animals Attacked.	Dogs.	Other Animals	Outbreaks.	Slaughtered as Diseased or Exposed to Infection
	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Week ended July 4, 1903 ..	15	19	..	..	39	71	..	..	25	123
Corresponding week in 1902 ..	9	10	..	..	26	42	..	..	63	218
Corresponding week in 1901 ..	10	10	..	..	30	52	..	..	92	463
Corresponding week in 1900 ..	4	5	..	..	21	34	..	..	59	559
Total for 27 weeks, 1903	445	704	..	..	719	1185	..	..	904	4,314
Corresponding period in 1902 ..	386	635	1	120	589	1074	12	2	931	4,316
Corresponding period in 1901 ..	366	514	12	669	679	1174	1	1	2,207	10,694
Corresponding period in 1900 ..	307	497	9	123	566	981	..	..	1,233	13,139

NOTE.—The figures for the Current Year are approximate only.

Board of Agriculture, July 7th, 1903.

Swine Fever Order Difficulties.

At Bridgnorth on Saturday, June 27th, Mr. William H. Walker, dealer, Bentley Hall, near Walsall, was summoned for removing 21 store pigs from Staffordshire to Claverley without a license from the Shropshire authorities.—Mr. Baker (Willenhall) defended.—It seems that the pigs were removed from Montgomeryshire through Staffordshire to Claverley, and that the Staffordshire authorities granted a certificate for their removal out of their county.—The defendant pleaded ignorance, and said he thought the certificate obtained from Staffordshire was sufficient.—The Bench, after examining the certificate, said that the document was certainly misleading, and under the circumstances the defendant would only be fined £1 and costs; otherwise the penalty would have been a heavy one.—*Wolverhampton Express and Star.*

ARMY VETERINARY DEPARTMENT.

Extract from *London Gazette.*

WAR OFFICE, PALL MALL, July 3.

Warwickshire I.Y.—Veterinary-Capt. T. Horton resigns his commission.

COMMUNICATIONS, BOOKS AND PAPERS RECEIVED.—Messrs. W. H. Dalrymple, G. Thatcher, J. Gosling, F. E. P. *American Veterinary Review, The Times of India,*

Original articles and reports should be written on one side only of the paper and authenticated by the names and addresses of the writers, not necessarily for publication.

We shall be obliged by early intelligence of all matters worth bringing under the notice of the profession, and thankful to any friends who may send us cuttings from local papers containing facts of interest.

Communications for the Editor to be addressed 20 Fulham Road, S.W.

CORRESPONDENCE.

JURY EXEMPTIONS.

Royal College of Veterinary Surgeons,
Solicitor's Address, 32 Essex St., Strand.

Dear Sir,

At the recent Council meeting of the Royal College of Veterinary Surgeons the case recently decided in the Irish Court that the Members of College in Ireland were exempted from service on juries was brought forward, and I was instructed to see whether the same result could not be obtained in England.

The course I recommended was, that as soon as the Overseers publish the Jury List a certain number of Members of College should object to their names appearing, and that their objections should be supported before the Justices, and if any such application should be unsuccessful then that the Justices should be asked to grant a case, and the matter should be brought before a Divisional Court. This the Council approved, and also promised to pay any expenses I might incur in conducting the case of a selected Veterinary Surgeon before a Divisional Court. What I want now is volunteers, and I have already obtained one in the person of Mr. Lionel Stroud. If, say, six or eight Members of College within 20 miles of London would come forward for the purpose and communicate with me I should be very much obliged.

If I have only one case we might be thrown over for a year either by the Overseers themselves striking it out of the list, or by the Justices doing so. As you will see, we are riding for a fall in the first instance.

The Council passed a vote of thanks to Mr. Allen for the gallant manner in which he had fought for the privileges of the profession in the Irish Court, and in this I am sure every one of your readers will heartily concur.—I am, dear Sir, your obedient servant,

GEO. THATCHER.

July 4th, 1903.